

## **CLAIMS**

**What is claimed is:**

**1. A high frequency package comprising:**

**a ground plate;**

**a metal frame disposed on the ground plate and having an aperture for connection with an external terminal;**

**dielectrics disposed on the ground plate, and on which a high frequency transmission line and a plurality of input and output terminals are formed;**

**semiconductor circuitry contained in the metal frame;**

**connecting portions which connect the semiconductor circuitry to the input and output terminals; and**

**a metal lid for covering the space that the metal frame embraces, wherein**

**the frequency of the slot-resonance arising from electromagnetic resonance between the metal frame and the ground plate, is shifted outside the limit of the frequency bandwidth used in the semiconductor circuitry by changing the width of the aperture.**

**2. A high frequency package according to claim 1, wherein the aperture is filled with a dielectric and has no gaps therein.**

**3. A high frequency package according to claim 1, wherein the aperture is filled with an insulating material and has no gaps therein.**

4. A high frequency package comprising:

- a ground plate;
- a metal frame disposed on the ground plate and having an aperture for the connection with an external terminal;
- dielectrics disposed on the ground plate, and superficially on which a high frequency transmission line and a plurality of input and output terminals are formed;
- semiconductor circuitry contained in the metal frame;
- connecting portions which connect the semiconductor circuitry to the input and output terminals;
- a metal lid for covering the space that the metal frame embraces; and
- slot antenna apertures provided in the metal frame and having a width that is different from that of said aperture in the metal frame, wherein
  - the frequency of the slot antenna slot resonance arising from electromagnetic resonance between the metal frame and the ground plate, is set to unnecessary frequency within the frequency bandwidth used in the semiconductor circuitry by changing the width of the slot antenna aperture.

5. A high frequency package according to claim 4, further comprising a plurality of the slot antenna apertures differing from each other in width.